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Census Data News

Ce document est aussi disponible en français. Si vous préférez un exemplaire français, dites-le nous. Nous vous en enverrons un et les numéros ultérieurs vous arriveront dans la langue de votre choix.

Vol. 1 No. 1



This is the first in a series of newsletters telling of our plans for the dissemination of data from the 1971 Censuses of Population, Housing and Agriculture.

This issue outlines documentation to facilitate the search for data derived from these censuses. Subsequent issues will review other parts of the Data Access Program.

These newsletters are designed to inform you as fully as possible about the development of the program; to explain the way in which it works and to alert you on the timing of the release of data. We hope this will make it easier for you to obtain and use the data in a way that will be beneficial.

The range of census data is extremely wide, forming as it does, a very detailed picture of the socio-economic characteristics of the Canadian people wherever they live and work; and of the state of Canada's agriculture as of mid-1971.

As in previous censuses, Statistics Canada will make these data available in a large number of published reports. But for the 1971 census much more will be available than before in machine-readable form, computer tapes, in microfilm and microfiche and by user-defined areas. A special section has been formed in Statistics Canada's Census Division to meet the growing data needs of users in governments, business, industry and the universities.

Printed publications are listed in a 1971 Census Catalogue — the first edition of which is now available and may be ordered from Publications Distribution, Statistics Canada, Ottawa

K1A OT6. This interim catalogue lists approximately 300 census publications, by catalogue number and price and in most cases includes a brief description of contents. Further editions of the catalogue will include additional publications. A catalogue giving details of the data available on summary tape and microforms will be issued in the near future.

For any information you may need about the total program of census data access you are invited to write the Census User Enquiry Service, Census Division, Statistics Canada, Ottawa K1A OT7 or telephone (613) 996-5627.

We look forward to serving your needs for census data as promptly and as fully as possible.

We will be pleased to send a copy of this and future issues of the Newsletter to any of your associates. Please complete the enclosed sheet and mail it to the above address.

1971 Census Data Documentation

The purpose of the documentation is to describe the 1971 census content, the tabulations which may be obtained from this content, and also to indicate which tabulations will be available in the regular publication programme. Two basic documents are being compiled — the Data Dictionary which describes the census content and the Census Tabulation Directory which shows what tables are available and the media in which they can be found.

Fundamentally, the census content consists of answers to questions asked during the 1971 census. The Census Master Data File contains,

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 Statistics Canada Statistique Canada

Published by the Authority of the Minister of Industry, Trade and Commerce.

in coded form, the answers each individual has given to the census questions.

If a user knew exactly which questions were asked and the range of responses recorded on the master file, he would know which tables could be extracted from that file. If the question that interests him was not asked or if the particular response that interests him was not among the codes listed, then the information he seeks is not available from the Census.

The *Census Data Dictionary* gives information about the census content. It describes the questions asked and shows how the responses were recorded in the Master File.

The Dictionary has three sections. One section covers the Census of Population and Housing; one the Census of Agriculture; and the third, Census Geography. Both Agriculture and Geography will be the subject of separate newsletters; this newsletter will concentrate on the questions from the Population and Housing Census.

Suppose for example that a user is interested in the distribution of the population by age and sex, with age in five year age groups. By looking in the Dictionary he could see that the census did ask each respondent his sex and his age. (Age was coded in single years of age up to 99.) Those older than 99 were coded in an open ended group, '100 and over'. Thus the user would know that an age distribution in five year age groups is available and that the information he requires can be drawn from the census data.

Had he been interested in a distribution of dog owners by age and sex, he would have found, by looking in the Dictionary, that no question on pets was asked, so that this information could not be obtained from the census data. He would also discover from the Dictionary that he could obtain no information on persons 105 years old since exact age 105 was not among the data recorded on the Master File.

There is one other constraint that could make a desired table logically impossible from the census data. Some questions were asked of only a selected portion of the respondents. This selection criterion is the response to an earlier question, often that on age. For example, the labour force questions were asked only of those who were 15 or more years old.

The Dictionary also gives this information. It indicates which questions were asked only of a

selected portion of the respondents, and it indicates the criteria for the selection of each question. Thus by looking in the Dictionary a user could tell that a table including the occupation of those 10 years old was impossible because the occupation question was not asked of 10 year olds.

The Dictionary also gives the user other information which he needs to know to use the data properly. It indicates whether the question was included in the 1966 and 1961 Censuses. It tells the sampling fraction for any questions asked of a sample of the population. It points out any differences in the question over the last three censuses. And finally, it points out any special problems of interpretation that might arise with that particular question.

The Census Data *Dictionary* then, tells the user which tables are logically possible, and potentially available.

The Census Tabulation *Directory* tells the user which tables have been, or will be made available in the regular tabulation programme and the media in which they can be found.

The *Directory* is essentially a catalogue of all available tables, it describes each table and where it may be found among the printed reports, the microfilmed tables or the computer summary tapes.

The *Directory* will have several features not ordinarily available in a catalogue:

- a. Each table will be described with terms defined in the Dictionary, so the user of the *Directory* will always have available a complete definition of each term.
- b. The *Directory* not only indicates which variables appear in the table, it also shows the exact form of the data. For example, age is coded on the master file in single years, but in most tables, age data appear in broader groups such as under 5, 5 to 9, etc. The *Directory* indicates the specific grouping for each variable in the table.
- c. Tables listed in the *Directory* are grouped in several different ways to facilitate search by a user. In one section of the *Directory* the tables are grouped by tabulated variables e.g. all tables involving age are listed together; all those involving education are listed together, etc. In another section, the tables are grouped by type of area covered – all tables available for Census Tracts are



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<https://archive.org/details/31761116320599>

listed by media – all tables available in printed reports are listed together – all those on computer tape, etc.

A user who is interested in data on 'Occupation' can turn at once to this section of the Directory and find a complete description of all tables involving occupation plus the locations of those tables. Similarly, a user interested in knowing what is available by Census Tract can go to that section of the Directory.

Since each table will be listed in several places, the Directory will be a massive document of some 1,500 pages. Because of the logical ordering of the tables, the Directory will be no more difficult to search than a large telephone book; however users with specific interests may wish to avoid the cost of buying the entire document. Major sections of the Directory will therefore be available separately. A user will be able to purchase only that section in which tables are grouped by type of area covered, or that section in which tables are grouped by tabulated variables, etc. The Directory will also be available on microfilm.

These two documents – the Dictionary and the Directory – describe the Census data and the tables that have been made available from it. The Dictionary describes the content of Census Master data file; the Directory describes the tables that have been made from that file.

Using the Documentation

The Dictionary and Directory give the user the information he needs to order tabulations from 1971 Census data. The Tabulation Directory gives him a complete description of every table available. If he finds that the table he wants is not available in the regular tabulation programme, the Dictionary will indicate if that information is potentially available, and also enables him to phrase his request for special tabulations in a standard language. The Data Dissemination Section will provide a standard request form on which the user can describe his request, and order the tabulation. If requested, the Data Dissemination Section will give the user an estimate of the time it will take to prepare the tabulation and an estimate of the cost involved. This form will be described in a subsequent newsletter devoted to special request procedures.

Suppose for example that a user is interested

in how education may vary according to a person's age and sex in Canada and that he wonders if the 1971 Census might shed some light upon the subject. He refers to the Census Data Dictionary. At the front of the Dictionary he finds an index that lists the terms found in the Dictionary and their common synonyms. This is similar to the index at the beginning of the Yellow Pages of the Telephone book, which says, among other things, that to find "Casocks" look under the heading "Church Supplies".

When he looks under "Education" in the Dictionary index, he is referred to several questions such as "Vocational Training" and "Level of Schooling". The user now knows that some data exists in the Census on the subject, and he knows where to find additional information in the Dictionary. The Dictionary is in alphabetical definitions. See Appendix A for an example of a Census Dictionary Definition. If the user also needs information about Census data on "Age" or "Sex", he could look up those two terms.

The user now has the basic information about the questions that interest him. He now needs to know what tables are available combining these variables. He turns to the Census Tabulation Directory for this information. The key to searching the Directory is the abbreviation found in the Dictionary – SCHOOL for level of schooling, AGE for age, and SEX for sex. The Directory is organized in terms of these abbreviations. Since the user is primarily interested in education, he turns to the SCHOOL section of the Directory, i.e. the section listing all tables containing data on level of schooling.

He finds a number of tables listed in this section, so he turns to the SCHOOL-AGE subsection where he finds listed all tables involving level of schooling and age. Within this subsection the tables are ordered by the abbreviations for the other variables in the cross tabulation. Thus the user can zero in at once on the type of table that interests him. See Appendix B for an example of the form of a Directory section.

The user now has before him all tables combining the variables that interest him. However, the Directory has even more information to offer. It indicates for each table, how the variables appearing in that table are grouped. This is indicated by a three digit code printed under the abbreviation for the term. These response

codes are defined in an appendix to the Directory. An example is given in Appendix C.

Availability of Documentation

We anticipate that English language versions of the Dictionary and Directory will be available early in July of the current year. Periodic supplements of the Directory will be issued as

new tables become available. The French versions of the documentation should be available about eight weeks later. Details of how to obtain these documents and their cost will be included in a future issue of the newsletter.

APPENDIX A

SCHOOLING, LEVEL OF SCHOOL

Refers to the highest grade or year of elementary school, secondary school or university attended.

CENSUSES:	1971 (1/3 sample), 1961*
REPORTED FOR:	total population
RESPONSES:	no schooling; kindergarten; elementary or secondary (grade or year); 1, 2, ..., 12, 13; years of university: none, 1, ..., 6; post-secondary (including trade or business schools, institute of technology, community college, schools of nursing, etc., none, 1, 2, 3.
REMARKS:	Persons who were enrolled in an educational institution at Census date reported the grade or year in which they were registered. Persons who attended only part of a year at university, or who attended the qualifying year, reported "University 1". If more than one year was required to complete 1 year of schooling, only one year was counted.

* Grades or years were categorized as Elementary 1 to 8 and Secondary 1 to 5 in 1961. Attendance at "other" post-secondary institutions was not recorded.

APPENDIX B

VARIABLES			TABULATION GEOGRAPHIC POPULATION COVERAGE		LOCATION	
SCHOOL 600	AGE 110	SEX 005	POP5+	CD	PO/FILM	DC52E
SCHOOL 600	AGE 110	SEX 005	POP5+	CMA	PO/FILM	DC52L
SCHOOL 600	AGE 110	SEX 005	POP5+	CT	PO/FILM	DC520
SCHOOL 622	ATT 855	SEX 005	POP5+	CD	RPT	92-720.39
SCHOOL 622	ATT 855	SEX 005	POP5+	PROV	RPT	92-720.37
SCHOOL 618	REL 710	AGE 110	POP5+	CMA	PO/FILM	DCV.1dM

NOTE:

- AGE — Age
- ATT — Attending School
- CD — Census Division
- CT — Census Tract
- CMA — Census Metropolitan Area
- PO/FILM — Available as computer printout or microfilm copies of computer printout
- POP5+ — Population 5 years old and older
- PROV — Province
- RPT — Report

APPENDIX C

AGE

107	108	109	110
5 - 14	TOTAL 5+	TOTAL 5+	TOTAL 5+
15+	5 - 14	5 - 14	5 - 9
	15+	15 - 19	10 - 14
		20 - 34	15 - 19
		35+	20 - 24
			25 - 34
			35+

Census Data News

Vol. 1, No. 2

Provincial Census Data Dissemination Centres

An important extension to the data dissemination program of Statistics Canada is that provided by the Provincial Census Data Dissemination Centres at the following locations.

Newfoundland:

Mr. George Courage,
Treasury Board,
Confederation Building,
St. John's, Nfld.
Telephone: 722-0711
Extension: 466
Area Code: 709

Prince Edward Island:

Mr. K. Wornell,
Economist,
Office of the Secretary,
Treasury Board,
P.O. Box 2000,
Charlottetown, P.E.I.
Telephone: 892-1821
Area Code: 902

Nova Scotia:

Mr. Paul G. Dober,
Economist,
Department of Development,
Bank of Montreal Building,
Halifax, Nova Scotia.
Telephone: 424-5691

New Brunswick:

Mr. C.R. Marks,
Director of Economic Research,
Office of the Economic Advisor,
Centennial Building,
Fredericton, New Brunswick.
Telephone: 475-7711
Extension: 381 or 484
Area Code: 506

Quebec:

M. J.-P. Baillargeon,
Directeur de la statistique générale,
Ministère de l'Industrie et du Commerce,
Bureau de la statistique du Québec,

710, Place d'Youville,
Québec, Québec.
Téléphone 643-2620

Ontario:

Mr. E. McCoy,
Ontario Statistical Centre,
Room 543,
Frost Building, Queen's Park,
Toronto, Ontario.
Telephone: 965-4575

Manitoba:

Mr. Arthur Gillman,
Director,
Manitoba Bureau of Statistics,
Suite 202,
323 Portage Avenue,
Winnipeg, Manitoba,
R3B 2C1.
Telephone: 942-8271

Saskatchewan:

Mr. G. Gartner,
Policy Analysis & Research,
Planning and Research Branch of the
Cabinet,
Room 123, Legislative Building,
Regina, Sask.
Telephone: 525-5605

Alberta:

Mr. D.G. Barker,
Alberta Bureau of Statistics,
Department of Industry and Commerce,
Government of Alberta,
1529 Centennial Building,
Edmonton, Alberta,
T5J 0H4.
Telephone: 229-3844
Extension: 7

British Columbia:

Mr. J.R. Meredith,
Director,
Economics and Statistics Branch,
Department of Industrial Development,
Trade and Commerce,
Parliament Buildings,

Victoria, B.C.
Telephone: 382-6111
Extension: 2707
Area Code: 604

The Provincial Census Data Dissemination Centres will have a broad range of census data available.

In addition to their primary responsibility for servicing provincial agencies, many of these centres will make the data and their expertise available to a broader range of users. It is suggested, therefore, that those interested in using data from the 1971 Census contact their local provincial dissemination centre to determine exactly what services will be available.

The 1971 Census Computer Summary Tape Program

Due to increased requests by users for machine-readable data, the 1971 Census of Population and Housing will produce a series of User Summary Tapes. Unlike the Census Master file, which contains all individual census records, the User Summary Tapes will contain only an aggregation of individual responses summarized into tables for specific geographic areas. Due to confidentiality requirements, the degree of details available is restricted according to the size of the geographic areas. Consequently, detailed cross-classifications will be available on computer tape only for the largest geographic units.

Summary tapes will be produced for the following selected geographic areas:

- Enumeration Areas
- Census Tracts
- Area Aggregates
- Counties/Census Divisions
- All municipalities
- Municipalities with population 5,000 and over
- Municipalities with population 30,000 and over.

Summary tapes will cost \$55 per tape reel. Each geographic level of tapes will contain from 14 to 30 reels which will include data for all Canada. The data for each geographic level will be subdivided by type of data into a number of files. For example, one of the enumeration area files will contain, for each EA in Canada, three tables giving basic demographic characteristics taken from the complete count. This file will be on one reel of tape. In general,

the data for each of the files will occupy one or two reels, and the various files may be ordered separately and by province.

Tapes are of no use unless they are purchased in a format compatible with the user's computer. Summary tapes will be made available in a variety of formats (the file sizes quoted above apply to 1,600 b.p.i., packed decimal). The format in which the tapes are required should be specified when ordering. The appendix sets out the complete technical descriptions of the format options available.

Complete Count Data Summary Tapes

There will be separate tapes for complete count data and for data obtained from the one in three households sample. Complete count data are obtained from twelve questions asked of all households. These yield such basic information as the relationship of household members to household head; age, sex, marital status, mother tongue and such housing data as type and tenure of dwelling, number of rooms in the dwelling, etc. The processing of information from the complete count has priority over sample data in both the tabulation and summary tape programs. Listed below by area of geographic coverage are the summary tape files for complete count data. Details for census divisions, all municipalities, and municipalities 30,000 and over will be contained in a later newsletter.

The detailed contents of summary tape files can be obtained by requesting documentation for the appropriate series from the Census User Inquiry Service, Statistics Canada, Ottawa, Ontario, K1A 0T7.

Enumeration Area Series

The enumeration area is the smallest spatial unit for which data are made available in the regular 1971 Census tabulation program. There are roughly 42,000 EA's, and each has an average population of about 500 persons. An EA map series will be available, and information about the availability and content of these maps can be obtained from the Census User Inquiry Service.

Five files containing complete count data at the enumeration area level will be available during the last quarter of the current year. These files are described below:

File No. (DSName)	Data type	Number of tables	Number of reels (1,600 b.p.i.)
A1DEM001	Demographic characteristics	3	1
A1DEM002	Single years of age	1	2
A1HSG001	Housing data	8	1
A1HHD001	Household data	6	1
A1FAM001	Family data	8	1

The Census Tract Series

Census tracts are small permanent statistical areas established in larger cities and are delineated by Statistics Canada according to the following criteria: (1) a population between 2,500 and 8,000 except for tracts in the central business district or institutional tracts which may have a lower population; (2) an area that is as homogeneous as possible in terms of economic

status and social living conditions; (3) boundaries that follow permanent and easily recognized lines on the ground; (4) as much as possible, a compact shape.

Only cities having a minimum of 50,000 persons at the previous quinquennial or decennial census are eligible for a census tract program. There are about 2,200 census tracts delineated in Canada.

Five files, described below, containing complete count data for census tracts will be available during the last quarter of 1972.

File No. (DSName)	Data type	Number of tables	Number of reels (1,600 b.p.i.)
B1DEMA01	Demographic characteristics —	1	1
B1DEMA02	Single years of age	3	1
B1HHD001	Demographic characteristics	5	1
B1HSGA01	Household data	8	1
B1FAMA01	Housing data	4	1

The Area Aggregate Series

An area aggregate is a small census statistical area of rural and/or urban type consisting of a group of contiguous enumeration areas. AA's cover those areas not covered by the census tract program.

The population of AA's generally ranges

between 4,000 and 6,000 persons, with a preferred average of 5,000 persons. The boundaries follow permanent physical features as much as possible and observe the geographic units that the provinces wanted to have respected.

Five files, described below, containing complete count data for area aggregates will be available during the last quarter of 1972.

File No. (DSName)	Data type	Number of tables	Number of reels (1,600 b.p.i.)
B1DEMB01	Demographic characteristics – Single years of age	1	1
B1DEMB02	Demographic characteristics	3	1
B1HHDB01	Household data	5	1
B1HSGB01	Housing data	8	1
B1FAMB01	Family data	4	1

Municipalities of 5,000 Population and Over

A municipality is defined as an area with corporate status, governed by Provincial and Territorial Acts. These acts differ from province to province. Moreover, municipalities within each province vary in name, status and administrative powers. Municipalities vary from census to census through annexation, amalgamation and change of name. These changes are

shown in the Historical Bulletin and the yearly bulletin "Changes in Municipal Boundaries" available from the Geography Section of Statistics Canada. Canada is divided into about 4,700 municipalities.

The five files, described below, containing complete count data for municipalities of 5,000 population and over will be available during the last quarter of 1972.

File No. (DSName)	Data type	Number of tables	Number of reels (1,600 b.p.i.)
B1DEMC01	Demographic characteristics – Single years of age	1	1
B1DEMC02	Demographic characteristics	3	1
B1HHDC01	Household data	5	1
B1HSGC01	Housing data	8	1
B1FAMC01	Family data	4	1

Sample Data Summary Tapes

Schedules for production of summary tapes for sample data are not yet available and the files to be produced will be described in a later newsletter. Interested users can, however, ob-

tain detailed descriptions of the contents by requesting documentation for the appropriate geographic level from the Census User Inquiry Service.

APPENDIX

TECHNICAL DATA – COMPUTER SUMMARY TAPES

Characteristic	Optional features		
	9 track- 1,600 b.p.i.	9 track- 800 b.p.i.	7 track
Recording mode	Phase encoding	NRZI (non-return to zero)	NRZI (non-return to zero)
Labels	IBM OS standard or unlabelled	IBM OS standard or unlabelled	IBM OS standard or unlabelled
Densities	1,600 b.p.i.	800 b.p.i.	556 or 800 b.p.i.
Error checking	Tracks-Block cyclical; byte-odd parity	Tracks-Block cyclical; byte-odd parity	Blocks-Longitudinal redundancy; byte-even parity
Track utilization	8 data; 1 parity	8 data; 1 parity	6 data; 1 parity
Recording language	EBCDIC	EBCDIC	BCD
Decimal representation	Internal (packed) or external (not packed)	Internal (packed) or external (not packed)	External (not packed) only
Interblock gap	0.6 inch	0.6 inch	0.75 inch
Width	0.5 inch	0.5 inch	0.5 inch
Length	2,400 ft. (max.)	2,400 ft. (max.)	2,400 ft.(max.)

Note:

User can request tape density, blocking factor to suit his needs; otherwise, the specifications will be: 9 track- 1,600 b.p.i. density, IBM OS standard label (DSName will be User File ID as listed). Recording will be EBCDIC with packed decimal representation.

Census Data News

1971 CENSUS GEOGRAPHY

Introduction

This issue of the newsletter deals with the standardized geographic framework. The next issue will deal with the new and innovative non-standardized geographic framework called geocoding. Together, the standardized and non-standardized geographic frameworks provide users with a variegated spatial basis for any data to be requested from the 1971 Census of Canada.

The standardized geographic framework of this newsletter attempts to broadly:

- describe the framework;
- relate the framework to the geographic code;
- indicate available relevant geographic documentation.

Standardized Geographic Framework

The standardized geographic framework consists of both administrative and conceptual geostatistical areas, that serve a wide variety of Statistics Canada's public and private requirements associated with the collection, analysis, evaluation and publication of descriptive, cartographic and statistical information. A wide range of research and evaluation programs was carried out by the Geography Section of the Census Division prior to the 1971 Census, in order to co-ordinate the relationship between the many different types of geostatistical areas to be used in 1971.

1 — ADMINISTRATIVE GEOSTATISTICAL AREAS

Administrative geostatistical areas employed in the 1971 Census include:

- Provinces and territories
- Federal electoral districts

Only population counts are published in volume reports for electoral districts though most of the basic characteristics will be available on microfilm, print-outs or summary tapes.

The census does not report on provincial electoral districts.

- Counties

Prince Edward Island, Nova Scotia, New

Brunswick, Québec and Ontario are divided into counties. British Columbia, in a recent revision of the administrative structure, created regional districts which are equivalent to counties. For equivalent areas in other provinces, see the section on census divisions.

Municipalities

Counties or their equivalents are divided into municipalities legally set up by provincial governments. The census provides much of its data on a municipality basis. Municipal boundaries, however, often change from one census year to another. Historical population reports and a special bulletin entitled *Changes in Municipal Boundaries*, facilitate historical comparison. Municipalities are known by a variety of names according to their legal status and the province in which they are located. Some have acquired the status of cities, towns or villages depending on criteria which vary from one province to another. Other terms exist in various provinces, for example: *parishes* in Québec and New Brunswick; *townships* in Québec, Ontario and Prince Edward Island; *local improvement districts* in Alberta; *improvement districts* in Ontario; *municipal districts* in Alberta and Nova Scotia; and *district municipalities* in British Columbia. All these municipalities are considered equivalent for purposes of the census.

— Indian Reserves

The reserves do not have the status of municipalities; but have their own identity. Even if they are located within the geographic boundaries of a municipality, they are counted separately. Data on Indian Reserves are published as a county total.

— Unorganized territories

In all provinces except New Brunswick, Nova Scotia and Prince Edward Island, part of the land is not divided into municipalities. These territories are usually sparsely

populated and directly administered by the province or county. In census tables, data for these unorganized territories appear as a county total or possibly as census subdivisions.

2 – CONCEPTUAL GEOSTATISTICAL AREAS

The political and administrative organization of a county does not always correspond to the needs of statistical presentation. Therefore, new areas must be established when administrative units are non-existent or fail to meet the needs of users. These are:

– *Census metropolitan areas and census agglomerations*

A census metropolitan area is the major labour market of a continuously built-up area with a population of 100,000 or more. Included are municipalities situated within the urbanized core (continuously built-up area) and peripheral municipalities with rapidly growing populations or where a low percentage of the labour force is engaged in agriculture and other primary activities.

A census agglomeration is based on a similar concept but on a smaller scale. It consists of a continuously built-up area which exceeds the boundaries of a single municipality and contains from 2,000 to 100,000 residents. All municipalities entirely or partially located in a continuously built-up area are included.

Thus, census metropolitan areas and census agglomerations are each divided into (a) the urbanized core, and (b) the fringe (i.e. the remainder of the census metropolitan area or census agglomeration, as the case may be).

– *Census divisions*

In Newfoundland, Manitoba, Saskatchewan and Alberta, where there are no counties, units called census divisions have been created. These units have the status of counties for statistical purposes, but have no administrative or political jurisdiction.

– *Census subdivisions*

Parts of Newfoundland, British Columbia and Nova Scotia have not been divided into municipalities. To provide more details on these unorganized territories, census subdivisions were created. These subdivisions are, for statistical purposes, equivalent to municipalities. Thus, the term “census subdivision” is also used to broadly designate all municipalities and conceptual equivalents

below the county or census division level.

– *Census tracts and area aggregates*

Because municipalities are the smallest administrative units and many research projects require data on smaller areas, intra-urban units called census tracts have been created in urban centres with more than 50,000 population. These statistical units have comparable populations, clearly visible physical boundaries, and are socio-economically homogeneous. To extend the application of this type of unit to the rest of the country, “area aggregates” were created which, like census tracts, contain a population of 4,000 to 6,000. Area aggregate data are only available on summary tapes.

– *Enumeration areas*

The enumeration area, which usually contains between 150 and 200 households, is the base unit for census-taking (i.e. the territory covered by one Census Representative in the field enumeration). Its boundaries always respect those of other geostatistical units. Enumeration areas are operational rather than statistical units, for they are not stable enough to allow a historical comparison of data.

Census Geographic Code

For identification with census publications it has been sufficient in the past to use the names of each geostatistical area, for example, Essex Federal Electoral District (FED); Vancouver Census Metropolitan Area (CMA); and Sherbrooke Census Tract (CT) (Centre); etc. However, with the recent extensive demand for summary tapes, area names are being replaced gradually by geographic codes. Essentially, the census geographic code is a system that allows each geostatistical unit to be identified separately to facilitate the processing of data.

The geographic code is available on the geographic tape file.

The “Geographic Tape File” is a computer tape which contains, for each EA record, the census geographic codes, the corresponding Universal Transverse Mercator co-ordinates (resulting from the geocoding of the enumeration areas), and the Standard Geographical Classification (SGC). The latter is different from the census geographic code and should not be confused with it. More detail about the SGC is available from the SGC Manual.

Users will be able to add their own codes to

this tape. Technical documentation on the Geographic Tape File and copies of the tape are available for \$55 from the Census User Inquiry Service.

As already stated, Canada is divided into a multitude of geographic units (more than 50,000) which lie one within the other, or overlap to form distinct areas. Each unit is a member of a "set of units" having similar administrative, political or geostatistical functions. The geographic code reflects this situation and makes it possible to determine the organizational structure to which each unit belongs. By this procedure, each unit can be identified separately. At least 13 sets of geographic units are identified by the code. Since this proliferation of sets and geostatistical units could lead to confusion in determining the hierarchy or organizational structure of the code, a diagram and explanatory notes are given in Appendix A.

Geographic Documentation

Standardized geographic framework and the application of the census geographic code to this framework enable a wide variety of geographic documentation to be made available from the 1971 Census. Such documentation includes:

Reference Map Series

These maps depict the geostatistical areas of the 1971 Census, and are available either in the regular reports or on request.

More than 100 outline maps depict the main geostatistical areas for which data are published. These maps, except the census tract series, provide no physical or cultural details.

In addition, the following series of maps which depict large and small geostatistical units on a variety of scales and provide some information on cultural and physical features are available on request. (See also "Availability of Reference Maps, 1971 Census".)

- (a) Census divisions and subdivisions — series G71-10 — a set of 25 maps at various scales.
- (b) Census tracts — series G71-11 — a set of large-scale maps showing 1971 census tracts for selected centres.
- (c) Enumeration areas — series G71-12, G71-13 and G71-14 — provide the complete coverage of 1971 enumeration areas (approximately 2,000 map pieces).

The set is available as three sub-series as follows:

G71-12: rural areas, approximately 1,000 map pieces.

G71-13: census tract areas, 553 map pieces at standard size 36" x 48".

G71-14: remaining areas, 443 map pieces.

- (d) Electoral districts and enumeration areas — series G71-15 — which cover Canada, consist of two sets of 91 maps at a scale 1:500,000. One set shows electoral districts and enumeration areas, and the other, census divisions and census subdivisions.

Maps on request are available generally as ozalid prints and/or on microfilm. On series G71-10 and G71-11, the user has a choice between ozalid prints with or without population counts of the 1971 Census plotted on the maps. If no choice is indicated, the latter set will be sent.

Enumeration Area and Census Tract Description

EA descriptions provide the user with a descriptive text of EA boundaries. For each electoral district, a separate booklet of EA descriptions is available (except for census-tractcd areas) together with a statement on the total count of population and households by EA. (Cost is \$75 for the complete set covering Canada, or 50 cents per ED.)

In census-tractcd areas, EA boundaries are described only in map form (series G71-13). However, a list of component EA's together with their population and household counts are available for each census tract.

CT descriptions are also available in booklet form. The cost of the complete set is \$5.

Official Lists

These documents contain the most commonly used codes.

They can be used:

- to locate EA's in their respective municipality or other subdivision;
- to determine which municipalities or other subdivisions belong to a given county or census division;
- to identify counties and census divisions in each province;
- to regroup geographic units according to user needs.

Official Lists are useful reference tools for users of small-area data who work with Computer Summary Tapes or Individual Sets of EA Computer Print-outs.

These lists are available in sets:

- Part 1: census divisions and census subdivisions
 - Part 2: census tracts
 - Part 3: census agglomerations
 - Part 4: area aggregates
- The cost is \$5 for all four parts.

Street Indexes

Street Indexes provide the link between street names, civic addresses, enumeration areas, and census tracts where they exist. They are available for 58 centres and were compiled in the year preceding the census. Only 18 of the largest centres have been updated according to the 1971 Census.

Street Indexes are available either in published form or on magnetic tape.

Municipal Boundary Changes

The Census Division is continually informed of changes in municipal boundaries and status. Once a year, this information is compiled and published in the bulletin entitled: "Changes in Municipal Boundaries". This bulletin indicates the nature of changes, land area and population of the last census.

Historical Correspondence Tables

The *Census Tract Correspondence Tables* list all 1971 CT numbers and give the equivalent 1966 numbers. The same type of table gives correspondence for 1966 numbers with 1961 and back to 1951, at the origin of the program. The reverse tables are also available. These conversion tables are available on request.

The *Enumeration Area Correspondence Tables*, similar to those for census tracts, are also available on request for the period 1966-1961 and 1971-1966. A series of technical papers are available in the "PH-Geog" series (PH-Geog-1, Census Geostatistical Areas; PH-Geog-2, The Census Geographic Code: Hierarchy and Documentation; PH-Geog-4, Census Thematic Maps Using Computers; PH-PW-1, Place of Work in the 1971 Census). They acquaint readers with geography as they relate to census data dissemination. Other papers are also available on the definition of census statistical areas and criteria of delimitation.

A Computer Base Map File for Census Data - CARTLIB

A magnetic tape file detailing the boundaries of certain census areas is now available to users of

census data. The location of the boundaries is approximate: they have been generalized into polygons usable by computer mapping programs such as SYMAP. The boundaries and area in square miles of counties and census divisions across Canada and census tracts for 30 major urban centres are included in the file. This file will enable users of census data to produce graphic displays (i.e. choropleth maps) of geographic distributions.

Summary

This framework provides users with both traditional and innovative geostatistical area alternatives, for which supplementary statistical, cartographic area descriptions, etc. information are available. In order to maximize the use of census information, users of census data are encouraged to familiarize themselves with the above framework, the census geographic code, types of geographic documentation, and the related explanatory material available from the Census User Inquiry Service, Census Division, Statistics Canada, Ottawa, Ontario K1A 0T7.

Amendments

The contacts at the Provincial Census Data Dissemination Centres listed in Census Data News, Vol. 1, No. 2 should be amended as follows:

Alberta:

Mr. Val T. Felesky,
Market Research Officer,
Alberta Bureau of Statistics,
Department of Industry and Tourism,
Room 1529, Centennial Building,
Edmonton, Alberta.
Telephone: 429-5956

New Brunswick:

Mr. C. R. Marks,
Director of Economic Research,
Office of the Economic Advisor,
Centennial Building,
Fredericton, New Brunswick.
Telephone: 435-2381

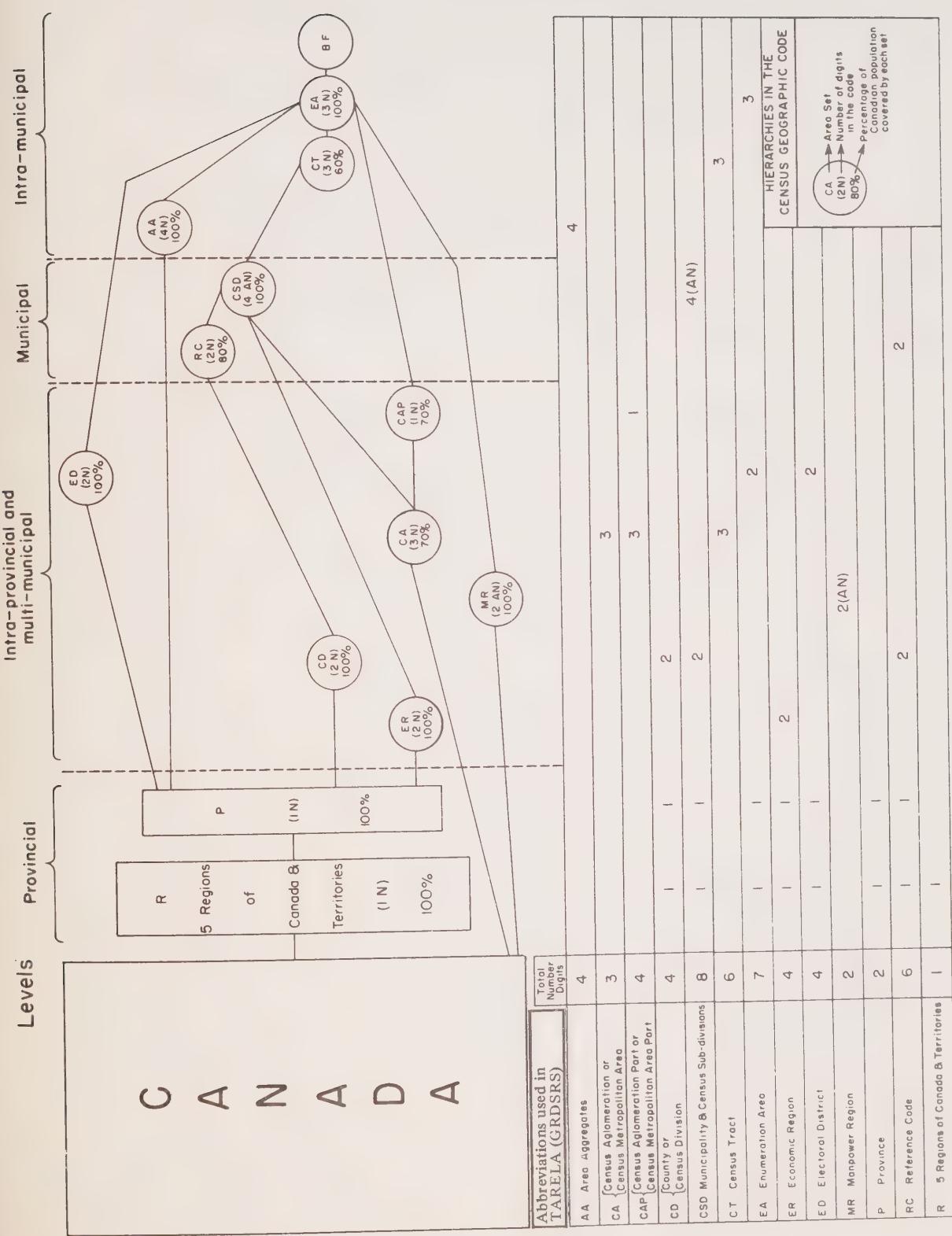
APPENDIX A

Hierarchies in the Census Geographic Code (How to use the diagram)

The upper half of the diagram overleaf contains circles and rectangles, each of which represents “a set” of geographic units. The information indicated in the circles and rectangles is from top to bottom: an abbreviation of the English name of the set (for example, ED for electoral district); the number of characters in the code for that set (N for numeric, AN for alphanumeric); the percentage of the population which resides in the areas covered by the “sets”.

The lines connecting the circles show the relationships between these “sets” of geographic units and indicate that the units of a set always fit perfectly into the units of the set marked at the end of the line, to the left.

The lower part of the diagram is used to determine the smallest number of digits required to identify, by its code, a unit of any given set across Canada. The English abbreviations of the set names are listed at the left of the table in alphabetical order. Each line indicates first, the set’s abbreviated name (identical to that used by the TARELA language in the geocoding system), then the full name of the set, and, in the next column, the total number of digits required to identify each unit of the set in question throughout Canada. The distribution of the total is given on the same line. Each distribution indicates the number of digits in the code and, by reference to the upper part of the diagram, the sets to which it belongs. For example: the shortest code to identify a census tract (CT) contains six digits: three digits to identify the census agglomeration (e.g., Brantford is code 032) and then three digits to indicate the code number of a CT itself (e.g., census tract code 024). Thus, the following statement: census agglomeration 032, census tract 024 uniquely identifies this census tract from all others across Canada. This will help determine the composition of the code to use. To obtain the codes (e.g., Brantford 032, CT 024), it is necessary to consult the geographic documentation previously described in this newsletter. More detail on the code and its hierarchies is available in technical paper PH-Geog-1.



Census Data News

JAN 5 1974

UNIVERSITY
OF TORONTO LIBRARIES

Vol. 1, No. 4

Ce document est aussi disponible en français. Si vous préférez un exemplaire français, dites-le nous. Nous vous en enverrons un et les numéros ultérieurs vous arriveront dans la langue de votre choix.

INTRODUCTION

This newsletter describes the census information released to date and available in printed publications, on microfilm, on magnetic tapes and special tabulations. It also includes explanatory notes on 'random rounding' and 'weighting' techniques.

The above topics are included in response to requests from a large number of census data users. Geocoding, which was to be the subject of this newsletter will be explained in a future issue.

AVAILABILITY OF CENSUS INFORMATION

You have probably heard the terms 2A and 2B data referred to, but, you may not be familiar with the significance of these terms.

The terms 2A and 2B refer to the two questionnaires used in the 1971 Census. The 2A or Short Form questionnaire contained 19 questions and was delivered to two out of three households. It covered age, sex, marital status, relationship to Head of household, mother tongue and basic dwelling information. The 2B or Long Form questionnaire was delivered to the remaining one third of the households. In addition to the 2A questions, the 2B questionnaire also included 50 socio-economic questions to provide information about religion, ethnic origin, education, occupation, industry, income, value of homes, rents and some household facilities.

A Census of Agriculture was also carried out which collected information about crops, acreage, livestock, farm machinery, and property values.

Almost all census tabulations based on the 2A data are available. However, because of the considerable volume of 2B data and the complex editing and evaluation procedures required prior to publication of these data, only part of the total 2B information is now available. The remainder will be released in the form of printed publications, and on microfilm and User Summary Tapes over the next 15 months.

Notification of the availability of census information is made in the Statistics Canada Daily (Cat. No. 11-001). Following this notification the variables can be used to prepare special tabulations prior to the release of the data in printed publications. The variables now available are listed in Appendix A. Copies of the Statistics Canada Daily can be obtained for 10 cents per copy (\$25 annually) by writing to:

Publications Distribution,
Room 1106,
Main Building,
Statistics Canada,
Ottawa, Ontario K1A 0T6.

Payment can be made by cheque or money order payable to the Receiver General of Canada. When requesting a specific issue of a publication or daily, please mention the Catalogue number and/or date.

1971 CENSUS PUBLICATION PROGRAM

Census information is released in four series:

1. Advance Series — contains basic information about demographic and social, housing and family, and economic characteristics. This series will also include data linking the Population and Agriculture censuses.
2. Volume Series — contains detailed data and cross-classifications of data relating to the four subject areas covered in the Advance Series, including a series of profile studies.
3. Census Tract Series — contains population, housing, family and economic characteristics for 29 cities, which have been divided into

statistical areas known as Census Tracts. There will be two reports for each city — one containing Form 2A data (Series "A") and the other providing Form 2B distributions (Series "B").

4. Special Series — covers basic information not included in the regular Volume Series which relates to more specialized subject classifications or provides more detailed areal classification of basic distributions of population data.

In total, the Printed Publications Program will consist of 273 reports (approximately 15,000 pages). This program has been completed for the 2A questionnaire (Advance and Volume reports) with 70 reports. The balance will follow in an order of priority to the end of the 1974 calendar year. Publications now available are listed in Appendix B. These can be ordered from Publications Distribution.

1971 Census Catalogue

The first edition of this catalogue was published in January 1972. The catalogue includes the procedure for ordering reports and information about additional data which are available but will not be published. A revised edition is being prepared.

Computer Print-outs and Microfilm of Unpublished Information

In addition to the tables listed in the 1971 Census Catalogue for release in the form of printed reports (or bulletins), a large number of tables have been produced in computer print-out form. These unpublished tabulations will be microfilmed and available as photocopies or on microfilm. Except for special requests, tabulation of 2B data will be restricted to those required for the Publication and Summary Tape Programs.

Unpublished data are individually prepared on request and the following charges, to cover cost of reproduction, are made:

PHOTOCOPIES — 20 cents per page
MICROFILM — 16 mm. Diazo — \$4.65
per roll
— 16 mm. Silver — \$5.75
per roll

Microfilms of unpublished tabulations are available on 16 mm. film and are supplied in

conventional 100 ft. rolls with a maximum of 1,500 images. Film is reproduced in diazo or silver copy.

In most cases more than one tabulation will be found on a roll, but only complete rolls are supplied. Cartridge loading and splicing are the customer's responsibility. (See Appendix A for data available on microfilm.)

A list of unpublished tabulations on microfilm is available and can be obtained by writing to the User Inquiry Service, Census Field, Statistics Canada, Ottawa K1A 0T7. Telephone 613-996-5254.

User Summary Tape Program

User Summary Tapes provide census tabulations in a machine-readable form. User Summary Tape files available to date are attached as Appendix C.

The User Summary Tape Program has already been described in a previous issue of this publication (Vol. 1, No. 2). Copies of that newsletter and various manuals describing User Summary Tapes may be obtained from the User Inquiry Service, Census Field.

Special Tabulations

Subject to confidentiality constraints to prevent identification of information about individuals, Statistics Canada will produce for users, at cost, special tabulations not already included in the tabulation program. Special tabulations can be produced for all variables released to date (see Appendix A), and for any geographical area; a standard geographical area or an area defined by the user. This information is provided by using the Geographically Referenced Data Storage and Retrieval System (usually called Geocoding), designed by Statistics Canada to reduce the time and cost of special tabulations of census data.

The cost of special tabulations varies with the population of the area for which the information is required, the sample size, the number of variables tabulated, the number of lines printed, and the amount of digitization required to specify the area prior to computer programming. As an illustration, the following tabulations are examples of the costs involved:
(a) Province of Ontario (Pop. 7,703,105) by county, showing population by single years of age to 18 years, by sex, by religion. \$54

(b) Ottawa – Hull Census Metropolitan Area (Pop. 602,510) by 5-year age groups, by sex, by ethnic origin. \$39

The users need not be concerned with the detailed production of the tabulation. The User Inquiry Service will assist users in defining their requirements and will provide an estimate of the cost involved before any tabulations are produced.

To help users in defining special tabulations, the following publications can be obtained from the User Inquiry Service:

- "GRDSR: Facts by Small Areas"
- "Geocoding: Guidelines for Requesting Geographical Areas"
- "Official Lists" – See Census Data News, Vol. 1, No. 3.

RANDOM ROUNDING AND WEIGHTING

Random Rounding

The Statistics Act states that no employee of Statistics Canada "... shall disclose or knowingly cause to be disclosed by any means, any information obtained under this Act in such a manner that it is possible from such disclosure to relate the particulars obtained to any individual person, business or organization" (Section 16 (1) (b), Statistics Act 1970). The development of new data storage systems and flexible, generalized retrieval software, and the size of the 1971 Census Tabulation and Publication Program have made it difficult to use manual methods to ensure compliance with the Statistics Act. Thus, a technique known as 'Random Rounding' is applied at the final stage of tabulations for all 1971 Census tabulations (including User Summary Tapes). The random rounding is on a base 5 so that all figures appearing in tabulations or publications will be multiples of 5, i.e., the unit digit is either '0' or '5'.

Although the tables subjected to random rounding appear similar to tables whose entries have been conventionally rounded, the process is different. In random rounding, the decision as to whether the last digit in a number will be rounded up or down (to a zero or a five) is determined by chance rather than by rules based on the value of the number. This aspect of the process introduces sufficient uncertainty into the last digit of a number to provide the

necessary protection against direct and residual disclosure. It is, therefore, impossible to attribute information to an identifiable individual directly by manipulation of several tables. The count for all data cells (including totals) is computed prior to rounding and consequently the totals (independently rounded) may not exactly agree with the sum of rounded elements which are included in the totals. The random feature prevents the derivation of the original figures by comparing table cells with the independent rounded totals and also makes the sum of rounded numbers an unbiased estimate of the sum of the original numbers.

The probability of rounding up or down is determined by the remainder (*r*) obtained when the number is divided by five (5). The probability of rounding up to the next higher multiple of 5 is $r/5$ and the probability of rounding down is $1 - r/5$. The following probabilities apply with a base 5 rounding:

Last digit of true count	Probability of rounding	
	Up	Down
0 or 5	0	0
1 or 6	.2	.8
2 or 7	.4	.6
3 or 8	.6	.4
4 or 9	.8	.2

This process ensures that no individual data cell differs from the true original count by more than 4. For example, a computed count of 486 will appear in a table as 485 with a probability of .8 and as 490 with a probability of .2.

Of concern to some users is that, small cell counts may suffer a significant distortion as a result of random rounding and that this will be magnified when these same data cells are aggregated. This distortion is the protection against disclosure and although individual data cells containing these small numbers may lose their precision, they do not lose their statistical value and aggregations can be used with confidence.

Since many applications of census data involve using small building-blocks (e.g. Enumeration Areas or Census Tracts) to create larger user defined areas, it is necessary to

re-aggregate data which have been rounded. Re-aggregation can be in two forms: the first, previously mentioned, involves aggregating small geographical areas into larger areas; the second, aggregating or grouping responses to a particular question within a geographical area. For example, for any geographical area, the population from age 6 to 16, inclusive, can be aggregated from single years of age counts.

Since probability is involved in rounding, the potential error arising from summing a series of rounded numbers can be expressed in terms of probability. The expected value of the error, and the variance can be precisely stated in terms of the number of data cells that were added and subtracted to produce a total. It is important to note that the same relationship applies to both subtraction and addition. Further details on the theory of the process can be obtained from the User Inquiry Service, Census Field.

Weighting

Information derived from the Long Form (2B) was collected on a 33 1/3% sample basis. Therefore, the weighted population for a given geographical area may differ from that shown for data collected on a 100% basis. These discrepancies do not indicate any errors in the processing and production of sample data, but reflect the variability associated with a sample and are the result of procedures used to weight the sample to obtain estimates from the total population. In all instances the total population (but not necessarily the inherent distribution) for Canada, the provinces and census divisions, for sample and 100% data will coincide, since the weighting factors used respected census division boundaries. Minor differences may occur for variables used as controls in the weighting process, with somewhat greater differences for variables not used as controls.

For further information on weighting procedures of the 1971 Census, please consult Population and Housing Research Memorandum No. PH-METH-2 published by Statistics Canada. This can be obtained from the Census User Inquiry Service.

CHANGES IN PROVINCIAL FOCAL POINTS

In each newsletter we will notify you of any changes in the provincial focal points. There are three such changes to note:

1. Québec:
Monsieur M. Turgeon,
Bureau de la Statistique du Québec,
Ministère de l'Industrie et du Commerce,
710, Place d'Youville,
Québec, Québec.
Tel.: 643-5116
2. Saskatchewan:
Mr. R. McMahon,
Policy Analysis and Research,
Planning and Research Branch of the
Cabinet,
Room 123, Legislative Bldg.,
Regina, Saskatchewan.
Tel.: 525-5605
3. Ontario:
Mr. E. McCoy,
Ontario Statistical Centre,
56 Wellesley West,
Queen's Park, Toronto,
Ontario.
Tel.: 965-4575

APPENDIX A

CENSUS VARIABLES RELEASED TO DECEMBER 1, 1973

Population Variables

- *Age
- *Sex
- *Marital Status
- *Mother Tongue
- *Farm Residence
- Ethnic Origin
- Place of Birth
- Religion
- Period of Immigration
- Language Most Often Spoken at Home
- Official Language
- Level of Schooling
- School Attendance

Household Variables

- *Relationship to Head
- *Number of Persons/Families/
Lodgers/in Household
- *Household Type
- *Non-family Persons
- *Family Persons

Family Variables

- *Number of Persons
- *Number of Children
- *Family Type
- *Family Heads

Housing Variables

- *Dwelling Type
 - *Dwelling Occupancy
 - *Tenure
 - *Number of Rooms
 - Number of Bedrooms
 - *Number of Persons per Room
 - Household Facilities
 - * — water supply
 - * — bath facilities
 - * — toilet facilities
 - refrigerator
 - home freezer
 - automatic clothes dryer
 - electric dishwasher
 - television
 - automobile
 - Fuel Type for
 - house heating
 - water heating
 - cooking
 - Principal Type of Heating Equipment
 - Period of Construction
 - Length of Occupancy
 - Estimated Value of Dwellings
 - Dwellings with Mortgage
 - Estimated Monthly Rents
- #### Economic Characteristics
- Labour Force Activity
 - Industry
 - When Last Worked

*Note: Indicates information is available on microfilm.

APPENDIX B

PUBLICATIONS RELEASED TO DECEMBER 1, 1973

Volume Series: Population

- 92-702 Census Subdivisions (Historical)
- 92-703 Electoral Districts
- 92-704 Census Divisions and Subdivisions — Atlantic Provinces
- 92-705 " " " " — Quebec
- 92-706 " " " " — Ontario
- *92-707 " " " " — Western Provinces
- 92-708 Cities, Towns, Villages, CMA's and CA's
- 92-709 Urban and Rural Distribution
- 92-710 Census Tracts
- 92-711 Unorganized Townships
- 92-712 Reference Maps
- 92-714 Sex Ratios
- 92-715 Age Groups
- 92-716 Single Years of Age
- 92-717 Marital Status
- 92-718 Women Ever Married by Number of Children Born
- 92-723 Ethnic Groups
- 92-724 Religious Denominations
- 92-725 Mother Tongue
- 92-726 Official Language and Language Most Often Spoken at Home
- 92-730 Marital Status by Age Groups

Advance Series: Population

- 92-752 Population of Federal Electoral Districts
- 92-753 Population of Census Divisions
- 92-754 Population of Urban Centres of 5,000 and Over
- 92-755 Urban-Rural Population
- 92-756 Population by Age Groups
- 92-757 Population by Marital Status
- 92-758 Population by Mother Tongue
- 92-759 Population by Language Most Often Spoken at Home and by Official Language
- 92-761 Population by Period of Immigration
- 92-762 Population by Ethnic Groups
- 92-763 Population by Religious Denominations
- *92-764 Population by School Attendance and Level of Schooling

Advance Series: Agriculture

- 96-718 Areas and Census-farms Reporting Field Crops
- 96-719 Livestock and Poultry on Census-farms
- 96-720 Farm Machinery and Equipment
- 96-721 Census-farms by Size, Area and Use of Farm Land
- 96-722 Census-farms by Economic Class; Farms with Sales of \$2,500 or More, by Product Type
- 96-723 Population, Tenure, Age and Residence of Operators, Type of Farm Organization
- 96-724 Irrigation
- 96-725 Vegetables, Fruits, Greenhouses, Nurseries and Mushrooms (31/10/72)
- 96-726 Fertilizer Use
- 96-727 Number and Area of Census-farms
- 96-728 Number and Area of Census-farms by Census Subdivisions

96-729 Selected Data for Census-farms, Classified by Economic Class -- Atlantic Provinces
 96-730 " " " " " " " " " "
 96-731 " " " " " " " " " "
 96-732 " " " " " " " " " "
 96-733 Data from the Post-Census Agriculture Sample Survey
 96-736 Forest Products from Census-farm Woodlots

Volume Series: Agriculture

- 96-701 Canada
- 96-702 Newfoundland
- 96-703 Prince Edward Island
- 96-704 Nova Scotia
- 96-705 New Brunswick
- 96-706 Quebec
- 96-707 Ontario
- 96-708 Manitoba
- 96-709 Saskatchewan
- 96-710 Alberta
- 96-711 British Columbia

Advance Series: Households, Families and Housing

93-736 Source of Water Supply and Type of Sewage Disposal
93-743 Basic Classifications of Households and Families
93-744 Summary of Housing Characteristics
93-745 Summary of Housing Characteristics (Sample Data)
93-747 Summary of Household Characteristics

Volume Series: Households, Families and Housing

- 93-702 Households by Size
- 93-703 Households by Type
- 93-704 Household Composition
- 93-712 Households, and Family Status of Individuals
- 93-714 Families by Size and Type
- 93-716 Families by Age, Sex, Marital Status and Sex of Head
- 93-717 Families by Selected Characteristics of Family Head
- 93-727 Dwellings by Tenure and Structural Type
- 93-728 Rooms per Dwelling
- 93-730 Number of Persons per Room
- *93-735 Bath and Toilet Facilities

Special Series: Population

Special Series: Population
92-771 Unincorporated Settlements
92-772 Specified Age Groups and Sex for Census Divisions and Subdivisions
92-773 Specified Mother Tongue for Census Divisions and Subdivisions

Special Series: Geography

Special Series: Geography

98-701 Land Areas and Densities of Statistical Units

Population and Housing Characteristics by Census Tracts (Series "A" – Form 2A data)

Population and Housing Characteristics by Census Tracts (2011)	
95-701	St. John's
95-702	Halifax
95-703	Saint John
95-704	Montreal
95-705	Quebec
	95-716 Peterborough
	95-717 Sarnia
	95-718 Sault Ste. Marie
	95-719 Sudbury
	95-720 Thunder Bay

APPENDIX B – Concluded

95-706	Sherbrooke	95-721	Toronto
95-707	Trois-Rivières	95-722	Windsor
95-708	Brantford	95-723	Winnipeg
95-709	Hamilton	95-724	Regina
95-710	Kingston	95-725	Saskatoon
95-711	Kitchener – Guelph	95-726	Calgary
95-712	London	95-727	Edmonton
95-713	St. Catharines – Niagara	95-728	Vancouver
95-714	Oshawa	95-729	Victoria
95-715	Ottawa – Hull		

*ERRATA – Some errors in the publications have been identified and errata statements prepared to explain the discrepancies. Copies can be obtained through User Inquiry Service.

APPENDIX C

1971 CENSUS COMPUTER SUMMARY TAPE PROGRAM

The User Summary Tape Program is designed to provide 1971 Census data based on Short Form (100% sample) and Long Form on magnetic tapes.

The User Summary Tapes released to October 22, 1973 are as follows:

File Name	Description	No. of Reels*
EA Series**		
A1AGR001	Agriculture	1
A1DEM001	Demographic Short	1
A1DEM002	Detail Age	2
A1FAM001	Family Short	1
A1HHD001	Household Short	1
A1HSG001	Housing Short	1
AA/CT Series**		
B1DEMB01	Detail Age	1
B1DEMB02	Demographic Short	1
B1HSGB01	Housing Short	1
B1FAMB01	Family Short	1
B1HHDB01	Household Short	1
MUN/CA Series**		
B1DEMC01	Detail Age	1
B1DEMC02	Demographic Short	1
B1HSGC01	Housing Short	1
B1FAMC01	Family Short	1
B1HHDC01	Household Short	1
Geography Tapes***		
GEOGTAPE	Geography Tape File	1
CARTLIB	Statistical Area	1
STRINDEX	Street Index File (1971) — 59 centres	1
AREAMAST	Area Master File	1

*Based on 1600 b.p.i. Packed Decimal format except Geography tapes which are based on 1600 b.p.i. External Decimal format.

**Available in both Packed and External Decimal formats. (The AA/CT and MUN/CA Series files can be concatenated or combined on one reel of tape, respectively.)

***Available in External Decimal format only.

A complete list of all files to be produced under this program was included in the Census Data News, Vol. 1, No. 2. Copies of this newsletter and other relevant information can be obtained by writing to the User Inquiry Service, Census Field.

Costs: Summary Tape cost is \$55 per reel (all inclusive). Statistics Canada reserves the right to review the costs of tapes at any time.

Documentation: Adequate documentation is provided in the form of reference manuals, detailed file specifications and record descriptions for each tape file supplied.

Options: User Summary Tapes are produced in accordance with technical specifications supplied by customers, as far as possible. The options available are discussed in the Census Data News, Vol. 1, No. 2.

